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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ALEJANDRO, RAYMOND

ART UNIT	PAPER NUMBER
1745	6

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,104

Applicant(s)

GARTSTEIN ET AL.

Examiner

Raymond Alejandro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

The national stage application must contain a reference to the provisional application either in an application data sheet (37 CFR 1.76) or in the first sentence of the specification, identifying it as a provisional application, and including the provisional application number (*See MPEP 1893.03(b) The filing date of a U.S. National Stage Application- Priority Claim under 35 U.S.C. 119(e)*).

Information Disclosure Statement

2. The information disclosure statement filed 03/11/02 (paper # 3) fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. *In particular, the information disclosed in document number WO 9203852 has not been considered.*

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 22, 26, 27. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "12" and "13" have both been used to designate the circuit board (*see page 4, lines 10-12 and line 27*). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "13" has been used to designate both the circuit board and the retaining ring (*see page 4, lines 10-12 and line 27*). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

6. This application does not contain an abstract of the disclosure. An abstract on a separate sheet is kindly requested to the applicants to meet formal requirements of this application. (however, an equivalent substitute copy of the disclosed abstract of document number WO 00/79635 has been placed in this application as it is noted that the application is a 371 of PCT/US00/17007, and thus the abstract of said international publication can also be used in the event that no abstract is provided along with the application papers).

7. This application makes reference to an application (see page 5, lines 20-24), accordingly, the current status of all nonprovisional parent applications referenced should be included.

Claim Objections

8. Claim 5 is objected to because of the following informalities: claim 5 recites the limitation "translucent" two times, thus, it is redundant. Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

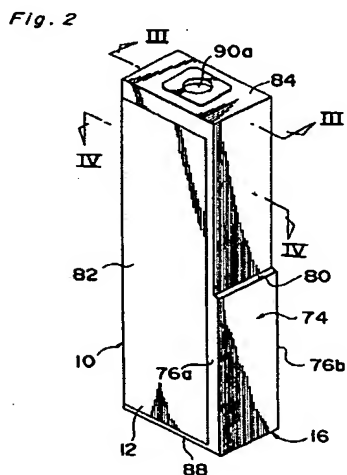
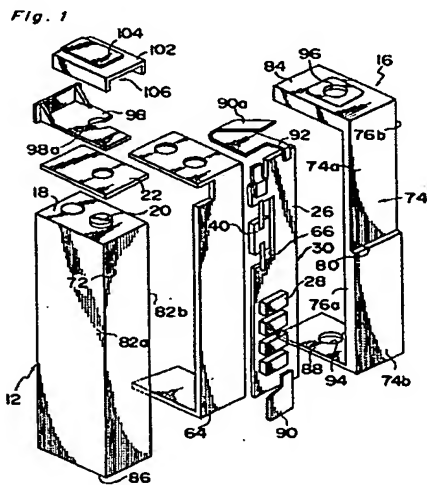
10. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Maruyama et al 5912092 as evidenced by Yukita et al 5705292.

The instant application is directed to a battery wherein the disclosed inventive concept comprises the specific circuitry externally connected to the electrochemical cell. Other limitations include the placement of the circuitry; and the specific housing components and connections.

With respect to claim 1:

Maruyama et al disclose a battery package 10 including a battery 12, an electronic circuit device 30 and a protective member 16 for enclosing the electronic circuit device 30 (*the housing containing electronic circuitry*) (col 3, lines 1-7). It is also disclosed that the battery includes an internal plus terminal 20 and an internal minus terminal 24 which are electrically connected with external plus and minus terminal members 90a and 90b of the battery package (col 3, lines 21-

31/col 6, lines 58-64). As illustrated in Figures 1-2, the protective member 16 for enclosing the electronic device 30 is externally connected to the electrochemical cell or battery 12.



Maruyama et al teach that the electric circuit device include first control means for disabling a charging of the battery when a voltage across the battery exceeds a first upper limit voltage and for enabling the charging of the battery when the voltage across the battery lowers below a first lower limit voltage; a second control means for halting the charging of the battery when the voltage across the battery during the charging exceeds a second upper limit voltage, a third control means for interrupting a supply of an electric power to the first and second control

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means when a voltage supplied from an external source exceeds a third upper limit value (col 2, lines 14-30). Thus, the electronic circuitry measures and generates the cell voltage across the electrochemical generating member which are the positive electrode and the negative electrode of said cell.

It is also noted that Maruyama et al's invention generally relates to a secondary battery such as a lithium ion secondary battery (col 1, lines 5-10), thus, Maruyama et al inherently disclose the battery components such as the negative electrode and the positive electrode. It is noted that a battery requires a negative electrode and a positive electrode in order to properly operate and generate electrochemical energy. In this regard, Yukita et al is herein presented to evidence that lithium ion secondary batteries require a positive electrode and a negative electrode (see ABSTRACT) to obtain a working battery. Hence, Yukita et al evidences Maruyama et al with respect to the foregoing subject.

With respect to claim 2:

As shown in Figures 1-2, the electronic circuitry 30 is physically isolated from or externally connected to the electrochemical cell 12. That is, the electronic circuitry is not disposed or placed inside or within the same container wherein the electrochemical cell is disposed.

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Allowable Subject Matter

11. The following is a statement of reasons for the indication of allowable subject matter: a reasonable search for the prior art failed to reveal or fairly suggest what is instantly claimed, particularly: the housing including the specific components as recited in claims 3-10.

12. Claims 3-4 and 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claim 5 would be allowable if rewritten to overcome the objection, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This prior art is pertinent because it was cited in an International Search Report. However, the examiner did not find them fully relevant for the following reasons: a) the abstract of Japanese document JP 09-139235 discloses a battery and an electronic circuit being housed in a box body, however, it does not expressly disclose that the housing containing the specific electronic circuitry is externally connected to the electrochemical cell as well as the electronic circuitry responsive to the cell voltage per se; b) the abstract of Japanese document JP 07-201358 discloses a battery constituted of a generating element, a battery vessel and control circuit but it does not expressly disclose the specific cell voltage measured across the positive and negative electrodes of the cell, that is, the electronic circuitry responsive to the cell voltage per se; c) Radley et al 5656876 discloses a battery pack comprising a stack of cells and a DC/DC converter

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in a housing for use in supplying current to an electronic apparatus, however, it does not expressly disclose that the housing containing the specific electronic circuitry is externally connected to the electrochemical cell as well as the electronic circuitry responsive to the cell voltage per se.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond Alejandro whose telephone number is (703) 306-3326.

The examiner can normally be reached on Monday-Thursday (8:30 am - 7:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on (703) 308-2383. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Raymond Alejandro
Examiner
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